关于江油市电网平均有效电量系数的说明

根据江油市近年来电力平衡结果分析可知,近年来江油市电网平均有效电量系数范围是 75%-85% 左右,具体原因有以下几个方面:

一、 江油市电网系统结构较为薄弱, 输送负荷能力有限, 电网送出瓶颈 限制电站发电十分普遍, 导致电站有效上网电量达不到设计水平。

二、 电网建设速度滞后于电站建设速度, 市电网无法接收辖区电站所发 全部电量, 水电站无法全负荷运行发电, 水电站发电不可避免的受到限制。

三、特别是在丰水期,由于江油市基本以无调节能力水电为主,由于电 网吸收能力有限,大量电量无法利用,弃水较为严重。

四、由于 2008 年四川大地震的影响,江油市电网收到破坏,这进一步降低了江油市电网平均有效电量系数。

此外,基于上述当地电网的现状,并根据四川省江油市"十二五"电力规 划与2020年远景目标中的电力平衡及电力负荷预测,由于电网公司接受能力 及当地电力需求能力的限制,江油市电网公司长期内无法全部接受电网内所有 水电站的发电量,特别是丰水期(或丰水年)和用电低峰期,这段时间,水电 站将不能发电,从而导致水电站的理论发电量与实际发电量之间存在差值,这 种现象将在未来十几年内长期存在。因此,我市内水电项目不能全年满负荷运 行,有效电量系数将在长期内保持75%-85%左右。

因此,江油市电网系统平均有效电量系数范围 75%-85% 是科学合理的。

特此说明!



The explanation of the Average coefficient of effective electricity Adopted by the grid system of Jiangyou City

According to Electricity Balance Analysis of Jiangyou City in recent years, the average coefficient of effective electricity of power grid system of Jiangyou City is around 75%-85%, and the reasons lies below:

- 1. The structure of the power grid system of Jiangyou City is vulnerable and the transmission load capacity is limited. The bottleneck on transmission is rather common, resulting in that the effective power supplied to the grid could not reach the design standard.
- 2. Comparing with the construction of hydropower stations, the construction of the power grid system is lagging behind and it is beyond the capacity of the power grid in the City to take over all of the power generated by the hydropower stations. Also the hydropower stations could not generate power to the full. The power generated by the hydropower stations will be limited inevitably.
- 3. Most of the hydropower stations in the City have no adjusting capacity, and due to limited capacity of the power grid system to absorb electricity, in rainy season, large amount of surplus electricity could not be utilized, which results in large loss.
- 4. Due to the Sichuan earthquake in 2008, the power grid system of Jiangyou City is damaged, resulting in that the average coefficient of effective electricity in Jiangyou City has decreased further.

In addition, according to power grid condition mentioned above, and based on the estimation of electricity balance and power load in Jiangyou City 12th Five Plan and 2020 Target for Electrical Power Industry, due to limited absorb capacity of the power grid company and restraints of local electricity demand, Jiangyou grid company can not accept all the electricity generated by hydropower stations covered by the Grid, especially in rainy period (or rainy year) and valley period of electricity consumption. During this period, the hydropower stations will suspend power generation, resulting in difference in power generation between theoretical power generation and actual power generation. This phenomenon will lasts for more than ten years. Therefore, the hydropower stations can not run with full capacity all through the year, and the coefficient of effective electricity will be about 75%~85% in a long-term period.

Therefore, it is reasonable to adopt 75%~85% as the average coefficient of effective electricity in Jiangyou City.

11th February 2009 Local Grid Company